# **Jet Propulsion Laboratory**

#### **INTEROFFICE MEMORANDUM**

930-04-011-AEA/ESB: lc

August 9, 2004

TO: J. A. Wackley

**FROM:** E. S. Burke

**SUBJECT:** Minutes for the DSS-45 Downtime Readiness Review (DTRR) Follow-up held

August 4, 2004.

# **DSS-45 Downtime Readiness Review Follow-up**

The DSS-45 DTRR follow-up was held on August 4, 2004 at JPL in building 303-209 with Canberra staff participating via teleconference link with Asim Sehic and Seyavosh Ghamari presenting. The DTRR was conducted to review and assess the readiness for all activities planned for the task scheduled to begin August 9, 2004 through December 5, 2004. This meeting is a follow-up to the meeting held on July 12, 2004, its purpose to discuss resolution of open items from the previous meeting.

A complete accounting of the meeting as well as presentation material and Action Item list can be viewed on the RAPSO DTRR website at following URL: http://rapweb.jpl.nasa.gov/DTRR.html

# **Review Board**

Gene Burke, Chairman	DSMS Operations, DSN RAPSO Manager
Wayne Sible	DSMS Implementation Engineering
Dennis Buck	DSMS Operations Representative
Michael Coluzzi	ITT, O&M Contractor Engineering Manager
Fred Battle	DSMS Safety Engineer
Jean Patterson	Antenna Maintenance Specialist, Div 33 Technical Representative
William Dobie	CDSCC Representative
Bruce Wiley	CDSCC Antenna and Facilities Manager
Art Andujo	Board Secretary

# Attendees

Abrahamy, Ezra	Dodge, Tom	Matossian, Harout
Andujo, Art	Feria, Alfonso	McNicholas, Desmond
Battle, Fred	Ghamari, Seyavosh	Morgan, Scott
Buck, Dennis	Hames, Peter	Murray, John
Burke, Gene	Hampton, Sherill	Osman, Jeff
Churchill, Peter	Kennedy, John	Owen, Chris
Coluzzi, Michael	Kruzins, Ed	Patterson, Jean
Cucchissi, John	Landon, Art	Rascoe, Dan
Dobie, Bill	Link, Christopher	Sehic, Asim

Sible, Wayne Sniffin, Bob Sosnowski, John Van Sickler, Peter Watzig, Gary Welch, Susan Wert, Mike Wiley, Bruce

# <u>Introduction</u> – G. Burke

The Downtime Readiness Review Board was introduced.

# **DSS-45 life Extension Task RFA Review**: – A. Sehic and S. Ghamari

**RFA 1:** Wiper Blocks not seen by OE or station personnel during visit to manufacturer. **Response:** MTC has confirmed manufacturing and shipment of wiper blocks. The receipt will be verified during unpacking at the station. These parts will not impede the downtime in

**Status:** The Board agrees that this issue is closed.

RFA 2: Station Ref. location may change.

**Response:** VLBI Tests incorporated into schedule and baseline test have been completed.

**Status:** The Board agrees that this issue is closed.

**RFA 3:** Add instruction in HIP to test & verify modifications to the drive control before operating antenna.

**Response:** The instructions have been added to the HIP.

**Status:** The Board agrees that this issue is closed.

**RFA 4:** Track reconstruction requires antenna pointing and recalibration.

**Response:** Added testing detail to schedule.

**Status:** The Board agrees that this issue is closed.

**RFA 5:** Baseline present state of antenna.

**Response:** Sherill Hampton scheduled VLBI and Phase/Noise tests. Testing has been completed but the results of the Allan eviation test produced unexpected results. Retesting has been rescheduled for 08-07-04. If this retest fails to produce correct results a baseline from a previous test done can be used.

**Status:** The Board agrees that this issue is pending, but should not stop the downtime from proceeding.

**RFA 6:** OE Test Plan for the antenna.

**Response:** The test plan has been completed and has been added to the integrated schedule.

**Status:** The Board agrees that this issue is closed.

**RFA 7:** USC Implementation

**Response:** The task has been integrated in to the schedule.

**Status:** The Board agrees that this issue is closed.

**RFA 8:** Grout cure above 16 degrees Celsius.

**Response:** MTC is prepared to provide heaters and tenting materials if necessary. The HIP includes documentation to cover this.

**Status:** The Board agrees that this issue is closed.

**RFA 9:** Overall downtime schedule.

**Response:** The integrated schedule has been revised to reflect all downtime tasks. Extra

time was gained by consolidating some tasks.

**Status:** The Board agrees that this issue is closed.

### **Additional Action Items**

**Action Item 10:** Bruce Wiley has been tasked to ensure that Garry Smee provides safety and environmental impact document feedback and requirements to Seyavosh Ghamari for incorporation into the safety plan.

**Response:** The last revision (revision C) has been released, incorporating the changes requested from the reviewers, including station personnel. Station personnel cited that there are some minor changes that are still required, but are satisfied with the results so far.

**Status:** The Board agrees that this issue is closed.

**Action Item 11:** Peter Van Sickler has been assigned the action to ensure that the station provides the DLF with ConAudit information for the hardware, so it can be delivered directly to the station from the manufacturer, in order to ensure that it is properly tagged and entered into the DSN parts tracking and inventory system.

**Response:** This task will be completed when Peter arrives at the station.

**Status:** The Board agrees that this issue is closed.

### **Task Status**

- The downtime schedule has been reworked and has integrated all tasks.
- The shipment from Tidbinbilla is on site containing the grout, motors, 4 azimuth and gearboxes. A sea van containing the pintle bearing, hardware, and additional tools, has cleared customs in Australia and is in route to the station, with arrival expected by August 9. The elevation gearboxes will ship from Japan on August 12, and are due to arrive on site August 20. There are no hardware issues that can impede the downtime.
- The paper Modkits will arrive on schedule.
- The jacking pads work is on schedule, to be completed by the first week of the downtime.
- USC Modkit is complete and is scheduled to ship from DLF September 14, and should be delivered by November 15, before the start of the USC work. A short brief of the USC task was discussed, and deemed ready for implementation.
- The Modkit/MESkits are signed-off, and liens are either released or signed off.
- The safety plan is complete and addresses all requirements, but a final version will be released at the end of day.

# **Other Issues**

The Schedule has been built assuming a 6-day by 10-hour workweek. CDSCC has the understanding that a 5-day 10-hour workweek will be required. This renders the schedule incorrect/obsolete.

# **Discussion:**

How can the schedule be corrected to incorporate 5 10-hour days, and also possibly factor in the desire to have the antenna available in the case of a cancelled Genesis capture on Sept. 8th? Other factors in this discussion included the canceling of the USC installation for DSS-45 in order to maintain the schedule.

An effort will be undertaken to deliver a revised schedule within 24 hours. However a 'higher authority' must make the decision concerning the relationship between Genesis and HEF Life Extension.

### **Board Summary:**

The Board has reviewed each of the success criteria and determined that all issues have been addressed satisfactorily and will recommend that the downtime proceed if the downtime schedule can be worked out satisfactorily. A final decision will be made after the Board reviews the schedule.